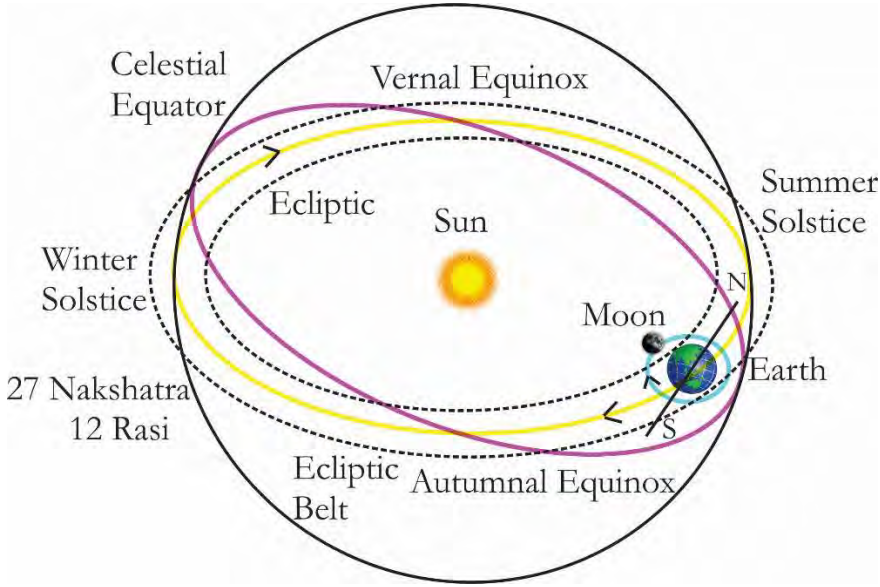


Description of Twelve Zodiac Signs in Ancient Indian Texts

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Introduction

The revolutionary orbit of the Earth around the Sun is known as Ecliptic. It is slightly elliptical circle. It is divided into twelve zodiac signs (राशि in Sanskrit). Since a circle is of 360° , each zodiac sign is of 30° ($12 \times 30 = 360$). It is often a great debate about the origin and the first reference of the twelve zodiac signs of Astronomy. In this article, the description of these twelve zodiac signs as found in the ancient Indian texts will be detailed, siting the concrete evidence and proofs.



Rig Veda

Rg Veda Samhitā 1st Maṇḍalam 164th Sūktam (Hymn) 48th Mantram (verse) reveals,

द्वादश प्रधयश् चक्रमेकं त्रीणि नभ्यानि क उ तच्चिकेत ।

तस्मिन्त्साकं त्रिशता न शङ्कवोऽर्पिताः षष्टिर्न चलाचलासः ॥

Dvādaśa pradhayaś cakram ekam trīṇi nabhyāni ka utacciketa ।

Tasmintsākam triśatā na śaṅkavo'rpitāḥ ṣaṣṭirna calācalāsaḥ ॥

Meaning :- **Dvādaśa – 12; Pradhaya – the arcs of a wheel; Cakram ekam – one wheel; Trīṇi – three; Nabhyāni – axles or hubs or center part of the wheel; Triśatā ṣaṣṭi – 360; Śaṅkava – spokes of the wheel; Calācalāsaḥ – movable and immovable.**

The arcs are twelve, the wheel is one and three are the axles. Who indeed knows it? Within it are collected three hundred and sixty spokes, which are as it were movable and immovable.

ṚG VEDIC DESCRIPTION OF ECLIPTIC AS ONE WHEEL

WITH 12 ARCS & 360 SPOKES

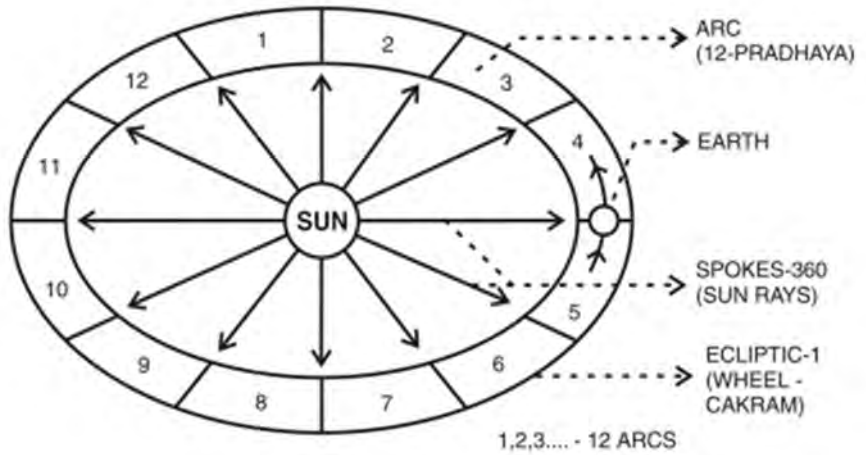


FIGURE - 1

Further, Ṛg Veda Samhitā 1st Mandalam 164th Sūktam (Hymn) 11th Mantram (verse) reveals,

द्वादशारं नहि तज्जराय वर्वर्ति चक्रं परि द्यामृतस्य ।

आ पुत्रा अग्ने मिथुनासो अत्र सप्त शतानि विंशतिश्च तस्थुः ॥

Dvādaśarām nahi tajjarāya varvarti cakram pari dyāmṛtasya ।

Ā putrā Agne mithunāso atra sapta śatāni vimśatiśca tastuḥ ॥

- Meaning : **Dvādaśa – 12**; Mithunāso putra – sons in pairs; Sapta śatāni vimśati – 720.
- **The wheel of law with 12 arcs goes round and round the Heaven.** It is not indeed to be decayed. Here stand, O Agni, the seven hundred and twenty sons in pairs.
- **360 days + 360 Nights = 720 Day and Night Pairs.**

Thus, in Veda, the most ancient texts of the world, the concept of twelve zodiac signs are well explained. Thus, it can be assertively and concretely mentioned that the concept of 12 zodiac signs had originated in Bharat only, that too at a period of remotest antiquity. Thus, it was known in Bharat since time immemorial.

How this concept has been developed in Bharat? What is the basis of this concept?

It is entirely based on the ratio between the time required by the Earth and Moon to complete one revolution of 360 Degrees.

When the Earth completes one revolution of 360 degrees around the Sun, the Moon completes 12 full synodic revolutions around the Earth in the same period of time. Thus, in terms of time, one revolution of the Earth around the Sun is equivalent to 12 synodic revolutions of the Moon around the Earth. One revolution of the Earth around the Sun is the duration of one year, during which period the Moon revolves around the Earth synodically 12 times, which is computed as 12 months.

Here the synodic revolutions of Moon and its period is considered, because thithi is calculated based on the relative motion of the Sun (apparent) and the Moon. Thus, there are 15 thithi from Amavasya (New Moon) on which thithi (approximately one day), Sun and Moon are conjunction, that is in the same longitude on viewed from Earth and on Purnami (Full Moon) thithi, Sun and Moon are 180 degrees apart (opposite) and again after 15 thithi on Amavasya, Sun and Moon will again be in conjunction. Thus, there are 30 thithi for one Month. Thus, the time taken for one full synodic revolution of Moon is computed as one Month with 30 thithi, i.e. either from the next thithi of Amavasya to Amavasya (Amanta Chandramana Calculation) or from the next thithi of Purnami to Purnami (Purnamanta Chandramana Calculation).

Thus, 12 months for a year and the 12 zodiac signs for one ecliptic circle are derived based on Astronomy only. Thus, it is nothing but the extension of time measurements into angular measurements. Thus 12 months of a year is computed as 12 zodiac signs of one ecliptic circle. This concept is explained in this two Rig Veda Manthra.

This is shown explicitly in the ancient astronomical texts of our Nation. For example,

1. Āryabhaṭṭīyam of Āryabhaṭṭa (Kālakriya Pādaḥ Sloka 1 & 2),

A year consists of 12 months; A month consists of 30 days;

A day consists of 60 nāḍi; A nāḍi consists of 60 vināḍika.

A vināḍika is equal to (the time taken by a man in normal conditions in pronouncing)
60 long syllables (with moderate flow of voice) or (in taking) six respirations.

This is the division of time.

The division of a circle (the ecliptic) proceeds in a similar manner from the revolution.

2. Vaṭeśvara Siddhāntaḥ and Gola by Vaṭeśvaraḥ mentions in 7th & 8th śloka of

Bhaṭṭanirdeśaḥ of Madhyagatyadhikāraḥ (1:1:7 & 8),

Six asu make one sidereal pala; Sixty pala make a ghaṭika;

Sixty ghaṭika make a day; 30 days make a month; 12 times of month is a year,

The divisions of the circle too have been defined, in the same manner as those of time, excepting those up to Asu.

1 Sāvana year -- 12 months - 360 days	1 Revolution --12 rāsis (Pradhaya, sign) (1 Circle, Bhagaṇa) -360 Amsa (Degrees)
1 Month -- 30 Days	1 Rāsi --30 Amsa (Degrees)
1 Day -- 60 Nāḍika (Nāḍi, ghaṭika)	1 Amsa -- 60 Lipta (Kala- minutes)
1 Nāḍi -- 60 Vināḍika (Vighaṭika)	1 Lipta -- 60 Vilipta (Vikala- Seconds)
1 Vināḍika -- 60 Gurvakhshara (Long syllables)	1 Vilipta -- 60 Tatpara (Thirds)

2. Sreemad Ramayana

In Balkhanda, 18th Adhyaya, 9th and 14th Sloka details the Janma Lagna and Janma Nakshatra of Sree Rama, Sree Bharata, Sree Satrugna and Sree Lakshmana. The 9th sloka details that Sree Rama took Avatara in Karkataka Lagna and Punarvasu Nakshatra, Sree Bharata took Avatara in Meena Lagna and Pushya Nakshatra and Sree Satrugna and Sree Lakshmana took Avatara in Karkataka Lagna and Aslesha Nakshatra.

ततो यज्ञे समाप्ते तु ऋतूनां षट्समत्ययुः।

ततश्च द्वादशे मासे चैत्रे नावमिके तिथौ॥1.18.8॥

नक्षत्रेऽदितिदैवत्ये स्वोच्चसंस्थेषु पञ्चसु।

ग्रहेषु कर्कटे लग्ने वाक्पताविन्दुना सह॥1.18.9॥

प्रोद्यमाने जगन्नाथं सर्वलोकनमस्कृतम्।

कौसल्याऽजनयद्रामं सर्वलक्षणसंयुतम्॥1.18.10॥

विष्णोरर्थं महाभागं पुत्रमैक्षाकुवर्धनम्॥ 1.18.11 ॥

पुष्ये जातस्तु भरतो मीनलग्ने प्रसन्नधीः॥1.18.14॥

सार्पे जातौ च सौमित्री कुलीरेऽभ्युदिते रवौ॥1.18.15 ॥

Thus, by mentioning the names of two of the twelve zodiac signs as Karkataka and Meena itself proves that during the Ramayana period Lagna was fixed based on the rising zodiac sign in the east at the birth time of the child.

3.Sreemad Mahabharatam, A text of Veda Vyasa

Text of Mahabharata of Veda Vyasa mentioned 12 zodiac signs (Adiparva, 3rd Adhyaya, 62nd, 144th, 163rd and 166th sloka. (Gorakhpur Edition and in other editions the sloka number vary slightly). Hence during Mahabharata period, the knowledge of zodiac signs were absolutely present.

Mahabharatam of Veda Vyasa, Adiparva, 3rd Adhyaya, 62nd sloka, with Nilakhantha Commentry, 1929 Pune

<p>एकं चक्रं वर्तते द्वादशारं पण्णामिमैकाक्षमृतस्य धारणम् । यस्मिन्वेधा अधि विश्वे विपक्ता- स्तावाश्विनौ मुञ्चतं मा विपीदतम् ॥ ६२ अश्विनार्वेदुममृतं घृत्तभूयौ तिरोघत्तामाश्विनौ दासपत्नी । हित्वा गिरेमश्विनौ गा मुद्रा चरन्तौ तद्वाप्रेमहा प्रस्थितौ बलस्य ७ ॥ ६३</p>	<p>युवां दिशो जनयथो दशाग्रे समानं मूर्ध्नि रथयानं वियान्ति । तासां यातमृक्पयोऽनुप्रयान्ति देवा मनुष्याः क्षितिमाचरन्ति ८ ॥ ६४ युवां वर्णान्विकुरुयो विश्वरूपां- स्तेऽधिक्षियन्ते भुवनानि विश्वा । ते मानवोऽप्यनुस्ताश्चरन्ति देवा मनुष्याः क्षितिमाचरन्ति ९ ॥ ६५</p>
<p>चपणी ऐहिक्यामुष्मिक्यी प्रजे । ततश्च द्विविधमपि भोगं नेच्छेत्सपिण्डादिति भावः ॥ ६१ ॥ एवं भवकस्य षष्टिषट्कालस्यैकाहोरात्रं निर्वर्त्य प्रदक्षिणप्रक्रमे पृथ्वीधकश- तत्रयसंमितैः सावनाख्यं संवत्सरचक्रं जगदायुक्षेपणमुक्तं द्वाभ्याम् । इदानीं प्रदक्षिणावर्ते भवके सूर्यचन्द्रयोश्च- दक्षिणप्रक्रमेण निर्वर्त्य सौरचान्द्रवत्सरचक्रे कर्मोपयोगिनी आह । तत्र एकास्मिन् शकौ प्रोताः पटशलाकाः पृथक् अन्ताश्चेद्द्वादशारं पण्णामि एकं चक्रं भवति । तत्र संवत्स- रोक्षः । संपाद्या राशयो द्वादशाराः । यद् ऋतवो नामयः । तच्चक्रं ऋतस्य कर्मफलस्य धारणं ध्रियतेऽस्मिन्निति तथा । अत्र हेतुः । यस्मिन्विधेदेवाः कालाभिमानिनाः अधि विपक्ताः । व्यवहिततश्चेति छंदसि व्यवहितक्रिययाप्यप-</p>	<p>चारयन्तौ विषयभूमिषु । तद्धूमिष्ठहा तस्याः मुदो शृष्टिस्तद्वृ- ष्टिस्तन्माहात्म्येन प्रस्थितौ विषयजसुखार्थिमाहात्म्यात्पराक् प्रावप्यमेव प्राप्ता । अत्र 'नायमात्मा बलहीनेन लभ्य' इत्यत्र बलशब्दस्य बोधसाधनसंप्रदाचित्वं दृष्टम् । गिरिशब्दस्यापि- गिरिति ह वै द्विपन्तं पाप्मानमिति श्रौतनिर्वचनबलात्साधन संपदुच्छ्राय परतयाख्यानं कृतम् । एवं चानादिविषयवासना- वशाद्ब्रह्मैव यद्वमिति दर्शितम् ॥ ६३ ॥ अस्य जीवस्य ब्रह्मा- त्मतावबोधार्थं तत्पदार्थस्वरूपं तावदाह । हे अश्विनौ युवा अग्रे सृष्टेः प्राक् दशादिशः प्राच्याद्याः जनयथः । अत्राक्षि एव सूर्योपाधिनी दिक्कल्पनातस्तत्त्ववृत्त्वमप्याह । मूर्ध्नि अर्थादिशाम् । अन्तर्दिशि इत्यर्थः । रथयानं रथेन यानं गमनमस्य तं सूर्यं समानं सर्वोपायकं तथा वियान्ति ज्योमानि । कल्पभेदाद्विधेदेवा</p>

One Circle with 12 divisions and spokes means one ecliptic elliptical pathway of the Earth around the Sun has 12 divisions, i.e. 12 Raasi (Zodiac Signs).

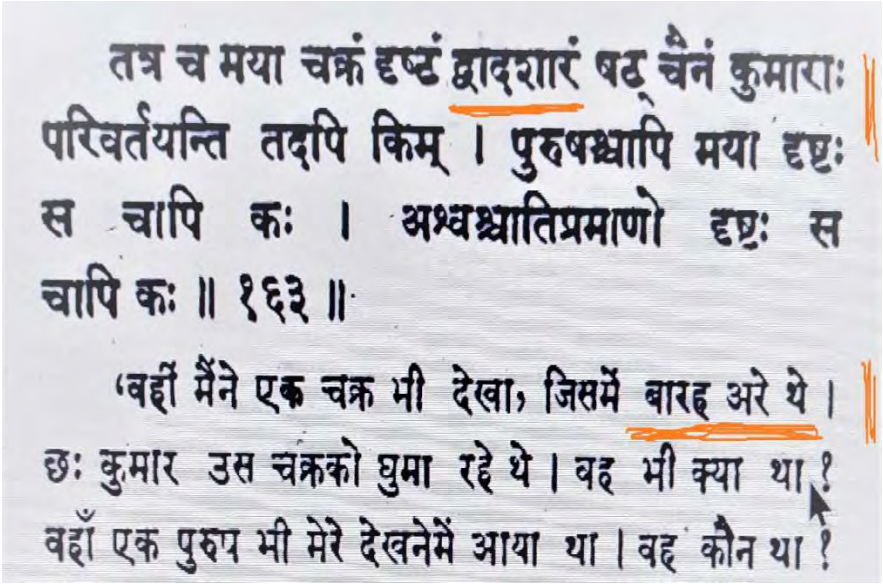
Mahabharatam of Veda Vyasa, Adiparva, 3rd Adhyaya, 144th sloka, Gorakhpur Edition

एवं स्तुवन्नपि नागान् यदा ते कुण्डले नालभत
तदापश्यत् स्त्रियो तन्त्रे अधिरोप्य सुवेमे पटं
वयन्त्यौ । तस्मिस्तन्त्रे कृष्णाः सिताश्च तन्तवश्चक्रं
चापश्यद् द्वादशारं षड्भिः कुमारैः परिवर्त्यमानं
पुरुषं चापश्यदश्वं च दर्शनीयम् ॥ १४४ ॥ स तान्
सर्वास्तुष्टाव एभिर्मन्त्रवदेव श्लोकैः ॥ १४५ ॥

इस प्रकार नागोंकी स्तुति करते रहनेपर भी जब वे उन
दोनों कुण्डलोंको प्राप्त न कर सके, तब उन्हें वहाँ दो स्त्रियाँ
दिखायी दीं, जो सुन्दर करघेपर रखकर सूतके तानेमें बस्त्र
बुन रही थीं; उस तानेमें उत्तङ्क मुनिने काले और सफेद दो
प्रकारके सूत और बारह अरोंका एक चक्र भी देखा, जिसे
छः कुमार घुमा रहे थे। वहीं एक श्रेष्ठ पुरुष भी दिखायी दिये।

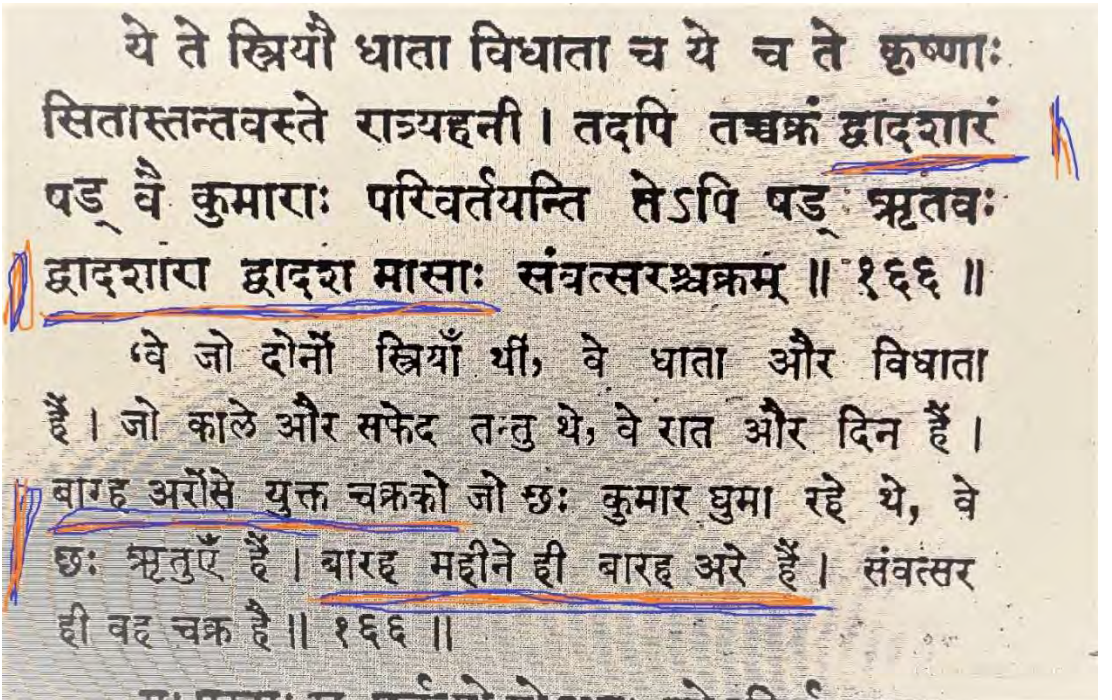
The Sanskrit word “चाप” means the arc of the circle, and द्वादश चाप means 12 arcs of a circle i.e. 12 zodiac signs

Mahabharatam of Veda Vyasa, Adiparva, 3rd Adhyaya, 163rd sloka, Gorakhpur Edition



Here again 12 divisions and spokes of one wheel is mentioned denoting 12 zodiac signs in the Ecliptic.

Mahabharatam of Veda Vyasa, Adiparva, 3rd Adhyaya, 166th sloka, Gorakhpur Edition



Here, the sloka clearly mentioned the 12 months of a year equating with the 12 divisions or spokes of a Ecliptic wheel.

Thus 12 divisions, arcs and spokes of one wheel denoting 12 zodiac signs are mentioned 5 times in four sloka (62nd, 144th, 163rd and 166th sloka of 3rd Adhyaya of Adiparva of Mahabharatam).

Thus, it strongly proves that 12 zodiac divisions were very much prevalent and used by people during the period of Mahabharatam.

4.Purana

1. Garuda Purana, 62nd Adhyaya describes the 12 zodiac signs elaborately,

The 1st Sloka mentioned that Sun will stay in 6 Raasi (Zodiac Signs) in day time and 6 Raasi in Night time every day (due to the rotation of the Earth on its own axis and thus Sun appears to be revolve round one rotation in one day, i.e. Earth's rotation on its own axis imposed on Sun).

The 2nd sloka mentioned the names of the 12 Raasi (Zodiac Signs) as Meena and Mesha, Vrisha and Kumbha, Makara and Mithuna, Caapa and Karkataka, Simha and Vruscika, Kanya and Tula and mentioned the duration of Sun's stay in Nadika, in each Raasi every day, due to rotation of the Earth on its own axis imposed on Sun.

10th Sloka classifies these 12 Zodiac signs into three groups.

2. Matsya Purana

The 53rd Adhyaya describes the benefit of gifting each Purana to others, and in the 43rd Sloka it is mentioned that one who donated Skanda Purana **after writing it** at the period, when the Sun is in Meeana Zodiac sign, will go to the Abode of Sree Siva. This proves writing method was prevalent even during the period of composition of these Purana by Vyasa, around Mahabharata period.

परिलिख्य च यो दद्याद्धेमशूलसमन्वितम् ।

शैवं पदमवाप्नोति मीने चोपागते रवौ ॥

The 127th Adhyaya 6th Sloka mentions that Jupiter remains in each Raasi (Zodiac sign) for one year.

अब्दं वसाति यो राशौ स्वदिशं गच्छति ॥ ६ ॥

3. Devibhagavata Purana

The 8th Khandha 16th Adhyaya 11th Sloka mentioned there are 12 months with 12 raasi (zodiac signs) for one year with two Ayana.

कालाचक्रगतो भुंक्ते मासान्द्वादश राशिभिः । संवत्सरस्यावायवान्मासः पक्षद्वयं दिवा ॥

The 31st Sloka mentioned that Mars revolves around 12 zodiac signs in three fortnights, if Mars is not in retrograde Motion.

पक्षैस्त्रिभिस्त्रिभिः सोऽयं भुंक्ते राशीथैकशः । द्वादशापि च द्वर्षे यदि वक्रे न जायते ॥

The 33rd Sloka mentioned that Jupiter will stay in one Raasi (Zodiac Sign) in one year

एकैकस्मिन्नथो राशौ भुङ्क्ते संवत्सरं चरन् । यदि वक्रो वृन्नेवानुकूलो ब्रह्मवादिनाम् ॥

The 34th and 35th Sloka mentioned that Saturn will stay in one Raasi (Zodiac Sign) for a period of thirty months,

सूर्यपुत्रोऽयं त्रिंशन्मासैः परिभ्रमन् ॥ ३४ ॥ एकैकराशौ पर्येति सर्वान् राशीन् महाग्रहः ।

4.Skanda Purana

The 1st Bhagam, Mahesvara Khanda, Arunacala Mahatmyam, Uttaradham, 7th Adhyaya, 30th Sloka 1 : 3 (2) : 7: 30), mentioned that Raasi (Zodiac signs) starting from Mesha, should be worshiped with flowers.

The 5th Bhagam, Aavantya Khanda, Caturaseeti Linga Mahatmayam, 50th Adhyaya, 19th to 22nd Sloka (5: 2 : 50 : 19 to 22), mentioned that Saniacara, son of Surya, will be stationed in each Raasi (Zodiac Sign) for 30 months and also mentioned its effect on human beings when Sanaicara is stationed in 1st, 2nd, 4th, 8th and 12th and 3rd, 6th and 11th and 5th 7th and 9th zodiac signs.

The 6th Bhagam, Naagara Khandam, 254th Adhyaya, 35th Sloka (6 : 254 : 35) mentioned 12 Raasi (Zodiac signs) and Nakshatra (Stars),

राशयो द्वादश तथा नक्षत्राणि तथैव च ।

The 7th Bhagam, Prabhasa Kshetra Mahatmyam, 206th Adhyaya, 62nd Sloka mentioned Raasi (Zodiac sign), in which Pitru Karya should be performed.

5.Siva Mahapuranam

The 1st Bhagam, Vidyeshvara Samhita, 18th Adhyaya, 104th Sloka (1 : 18 : 104) mentioned about Janma Nakshatra and Raasi (Zodiac Sign).

The 7th Bhaga, Vaayaveeya Samhita Uttarabhaga, 30th Adhyaya, 34th Sloka (7 : 2 : 30 : 34) mentioned that we have to worship the twelve Ādityas in the second Āvarana and the twelve Rāsis (signs of Zodiac) in the third Āvarana.

अथवा द्वादशादित्या द्वतीयवरणेयजेत् । तृतीयावरणे राशीन् द्वादश पूजयेत् ॥

6.Brahmanda Mahapuranam

In Madhyama Bhaga, 74th Adhyaya, 225th Sloka mentioned that when Moon, Sun and Jupiter are in Pushya Nakshatra, in one zodiac sign, Krita Yuga will commence, after the end of present Kaliyuga.

यदा चंद्रश्च सूर्यश्च तथातिष्यबृहस्पती । एकराशी भविष्यति तथा कृतयुगं भवेत् ॥ २२५ ॥

Previous few sloka describe the present Kaliyuga, its years and completion.

4. Astronomical Texts

All ancient astronomical texts of Bharat mentioned the names of zodiac signs like Mesha, Kanya, Tula and Meena, when they describe the beginning of Yuga and Ecliptic and celestial equator on explaining declination of various Graha.

For example Surya Siddhanta, Aryabhattiyam and Panca Siddhantika mentioned this respectively at 1st Adhyaya 54th Soka (mentioned as Raasi [zodiac sign] itself), 57th Sloka (Mesha zodiac sign), 58th Sloka (Makara, and Tula zodiac signs) in Surya Siddhanta,

The 1st Adhyaya 4th Sloka (Mesha Zodiac Sign), 3rd Adhyaya, 14th Sloka (mentioned Raasi of 30 degrees or Amsa [Zodiac sign] itself, 4th Adhyaya 1st Sloka (Mesha, Kanya, Tula and Meena Zodiac Signs), in Aryabhattiyam of Aryabhata and

The 2nd Adhyaya, 8th and 9th Sloka (mentions Makara and Karakataka zodiac signs), 3rd Adhyaya 23rd Sloka (Mesha and Tula zodiac signs), 4th Adhyaya 24th Sloka (Mesha, Rishabha and Mithuna zodiac signs), 13th Adhyaya 10th Sloka (Mithuna zodiac sign), 28th Sloka (Mesha zodiac sign), in Panca Siddhantika, a compilation of Surya, Vashishtha, Paitamaha, Romaka (Lomaka) and Paulisa Siddhanta, by Varahamihira.

Since Paulisa Siddhanta mentioned Vishnu, Dharma, Sadhu, Rahu and Naraka, (3rd Adhyaya, 28th, 32nd and 37th Sloka) it is definitely of Indian origin only.

In the same way, Romak Siddhanta mentioned Brahma, Prajapati, Indra, Siva, Chandra, Lakshmi, Agni, Yama, Surya, Go, Hara, Bhava, Guha, Varuna, Baladeva, Vayu, Sri, Kuvera, Bhumi, (1st Adhyaya 24th and 25th Sloka), it is also of Indian origin only. This also proves that the 12 zodiac sign concept had originated in India only, as the period of these Panca Siddhanta are much ancient than any other civilisation of the world.

5. Astrological Texts

Every Astrological text mentions these 12 zodiac signs. Parasara's "Bruhat Parasara Hora Sastra" alone is sufficient to be an example, as it is of high antiquity, well before Mahabharata period, as Parasara Rishi was the father of Vyasa of Mahabharata. Hence it strongly proves that the concept 12 zodiac signs has its origin in India and it was in vogue and practice even before the period of Mahabharata and thus in Mahabharata period, people followed this division of 12 zodiac signs.

The 4th Adhyaya, 3rd Sloka gives the names of all 12 zodiac signs perfectly as Mesha, Vrusha, Mithuna, Karaka, Simha, Kumarika, Ali: (Scorpion), Dhanu, Nakra (Crocodile), Kumbha, and Meena.

Further we have to understand properly that if an ancient text did not mention this 12 zodiac signs, it does not mean that it was not in practice during the period of that text. This is because, the purpose of the text and the narration of events that are going to be the subject of the text, if not warranted the mention of 12 zodiac signs, the text will not mention it. Then it definitely does not mean that the concept is absent during the period of the text. It may be or may not be present is the correct conclusion.

Thus, as per these evidence detailed in five headings, it is concretely and conclusively proved that the concept of 12 zodiac signs was first developed in India only, at a period of time that is immemorial. Thus, it has the remotest antiquity, much before the period of Mahabharata, Purana and even Sreemad Ramayana itself.

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